

#16



Attorney Docket No.: 462-96-004

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CERTIFICATE OF MAILING

I hereby certify that this paper is being deposited with the United States Postal Service with sufficient postage as first Class mail in an envelope addressed to:

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Washington, D.C. 20231, on this date.

*Kristine Carlson*

Signature of Depositor

Date: 7/31/00

In THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Dillard, et al.	)	<u>Supplemental Declaration of Kelly Dillard and David Goddard</u>
Serial No.:	08/861,989	)	
Filed:	05/22/97	)	
Title:	Copy Protection For Updates Transmitted Via Internet	)	
Group No.:	2764	)	
Examiner:	Retta, Y.	)	

35 Assistant Commissioner for Patents  
Washington, D.C. 20231

35

Sir,

40 I, Kelly Dillard, of Olathe, Kansas; and I, David Goddard, of Overland Park, Kansas, declare:

4. Exhibit A of this Supplemental Declaration contains a print out of the first and last page of a source code file for the computer routine "CRYPTDB."
5. Exhibit B of this Supplemental Declaration contains the print out of the first and last page of a source code file for the computer routine "UNCRPTDB."
- 45 6. Exhibit C of this Supplemental Declaration is a windows directory listing for the directory containing the files identified in paragraphs 4 and 5 above and shows that the files CRYPTD and UNCRPTDB were last modified on [REDACTED]
7. The source code files identified in paragraphs 4 and 5 above are used to implement one preferred embodiment of the invention.

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8. In [REDACTED] we actually reduced the invention to practice by conducting a proof of concept demonstration of the invention using the code files identified in paragraphs 4 and 5 above.

5 The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

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15

20 Signature: Carl O. Kael  
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Date: 7/26/00  
25

```
/*+module definition*****  
*****  
**  
** Copyright (c) AlliedSignal Inc. [REDACTED]  
**  
**  
** Name : CRYPTDB  
**  
** Description : This module is a very crude attempt to encrypt the dat  
abase  
** file used by KLX100.EXE. The encryption has a cumulat  
ive  
** randomizing effect on the output data, but is of cours  
e  
** not bullet-proof from super-sleuth crypt experts.  
**  
** Global Procedures:  
** Name Type Abstract  
** ---- - - - -  
**  
** Header for Code Management Software  
**  
**  
*****-*/  
#include <stdio.h>  
#include <stdlib.h>  
#include <io.h>  
#include <stdarg.h>  
#define FALSE 0;  
#define TRUE 1;  
#define MIDX_135 0x80 /* master index location for KL  
X 135 */  
#define MIDX_90 0x42 /* master index location for KL  
N 90 */  
#define MIDX_RS_135 14 /* 14 bytes per index entry */  
#define MIDX_RS_90 3 /* 3 bytes per index entry for  
90 */  
#define TAG_SIZE 162 /* 162 total bytes tagged on en  
d */  
#define KLN90_TYPE 1  
#define OTHER_TYPE 2  
  
typedef unsigned char BYTE;  
  
/* KLN 90 database modified memory structure */  
typedef struct
```

```

/* Compute table of CRC's */
crc_32_tab[0] = 0x00000000L;
for (i = 1; i < 256; i++)
{
    c = 0;
    for (k = i | 256; k != 1; k >>= 1)
    {
        c = c & 1 ? (c >> 1) ^ e : c >> 1;
        if (k & 1)
            c ^= e;
    }
    crc_32_tab[i] = c;
}

/*
-----*/
/* compute a CRC for a given byte stream
 */
/*
-----*/
unsigned long get_crc( void *buffer, register int length )
{
    register unsigned long crcval = 0xffffffffL;
    register BYTE *b = buffer;
    while (length--)
        crcval = crc_32_tab[((BYTE) crcval ^ (*b++)) & 0xff] ^ (crcval
>> 8);
    return ~crcval;
}

/*
-----*/
/* update a running CRC with a single byte
 */
/*
-----*/
void update_crc( BYTE c, unsigned long *crc )
{
    *crc = crc_32_tab[((BYTE)*crc ^ c) & 0xff] ^ (*crc >> 8);
}

```

```
/*+module definition*****  
*****  
**  
** Copyright (c) AlliedSignal Inc.  
**  
**  
** Name : UNCRYPT  
**  
** Description : This module is an "antidote" for a database file which  
has  
**           been encrypted by CRYPTDB.EXE.  
**  
** Global Procedures:  
** Name          Type      Abstract  
** ----          ----      -----  
**  
** Header for Code Management Software  
**  
**  
*****  
****-*/  
#include <stdio.h>  
#include <stdlib.h>  
#include <io.h>  
#define TAG_SIZE 162  
  
typedef unsigned char BYTE;  
  
void gen_crc_tab( void );  
unsigned long get_crc( void *buffer, register int length );  
void update_crc( BYTE c, unsigned long *crc );  
  
unsigned long crc_32_tab[256];           /* 32-bit CRC table */  
  
void main( void )  
{  
    FILE *infp;  
    FILE *outfp;  
    unsigned long lCRC32;  
    long int i, llen;  
    BYTE b, cInByte;  
    char infname[80];  
    char outfname[80];  
    long int db_stamped_key;           /* database key read fr  
om file */  
  
    do
```

```

for (i = 0; i < sizeof(p)/sizeof(int); i++)
    e |= 1L << (31 - p[i]);

/* Compute table of CRC's */
crc_32_tab[0] = 0x00000000L;
for (i = 1; i < 256; i++)
{
    c = 0;
    for (k = i | 256; k != 1; k >>= 1)
    {
        c = c & 1 ? (c >> 1) ^ e : c >> 1;
        if (k & 1)
            c ^= e;
    }
    crc_32_tab[i] = c;
}

/*
-----*/
/* compute a CRC for a given byte stream
 */
/*
-----*/
unsigned long get_crc( void *buffer, register int length )
{
    register unsigned long crcval = 0xffffffffL;
    register BYTE *b = buffer;
    while (length--)
        crcval = crc_32_tab[((BYTE) crcval ^ (*b++)) & 0xff] ^ (crcval
>> 8);
    return ~crcval;
}

/*
-----*/
/* update a running CRC with a single byte
 */
/*
-----*/
void update_crc( BYTE c, unsigned long *crc )
{
    *crc = crc_32_tab[((BYTE)*crc ^ c) & 0xff] ^ (*crc >> 8);
}

```

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Name	Modified	Size	Ratio	Packed	Path
Cryptdb.c	[REDACTED] 1:11 PM	14,581	68%	4,686	
Uncrypt.c	[REDACTED] 10:45 AM	5,451	62%	2,048	
2 file(s)		20,032	66%	6,734	